

Abstract

An acoustic testing apparatus for testing a laminate material comprising at least one layer of a first material having a first velocity for a first vibration mode and at least one layer, adjacent to said first layer, of a second material having a velocity for a second vibration mode, approximately equal to said first velocity, said acoustic testing apparatus comprising: a first transducer for projecting an acoustic test signal onto a first layer of said at least one layer of a first material disposed in a testing zone, wherein a second transducer for receiving said test signal from said testing zone, and in that said first transducer is adapted to project said test signal at an angle so as to generate in said first layer vibrations of at least said first vibration mode, wherein said vibrations of said first vibration mode are incident on an interface with said layer of said second material under an incidence angle so as to produce in said second layer vibrations of at least said second vibration mode, so that refraction of said test signal at said interface is suppressed.